

Amendments to the Specification:

Please replace paragraph [0012] with the following amended paragraph:

A1 [0012] In still another embodiment, the tubular member of the ablation device translates within a tubular guiding member, the distal portion of the ablation device is adapted to include a preformed shape. As the ablation device emerges from the distal opening of the guiding member, the distal ~~[[end]]~~ portion assumes its preformed curvilinear shape. The preformed shape may be selected to facilitate the emission of a uniform energy pattern therefrom.

Please add the following new paragraph after paragraph [0023]:

A2 [0023.1] Fig. 1C is another side view of the ablation system in accordance with the present invention.

Please replace paragraph [0034] with the following amended paragraph:

A3 [0034] The catheter 20 comprises a long tubular member 22 having a proximal portion (not shown) and distal portion 24, the proximal portion operably attached to a handle portion (not shown). The distal portion 24 includes, or otherwise incorporates, an ablation device 30 including one or more ablation elements. The one or more ablation elements are arranged and configured to emit ablative energy in a direction generally away from an emission surface of the catheter 20 body, a portion of the radiating energy pattern generally designated by the arrows ~~[[E]]~~ E₁ and E₂, and the emission surface corresponding to the outer catheter surface ~~from which the energy is emitted, directly or indirectly, with respect to catheter 20.~~

Please replace paragraph [0039] with the following amended paragraph:

A4 [0039] Now turning also to Fig. 1B, a catheter 100 in accordance with the present invention

is shown. As depicted in Fig. 1A with respect to catheter 20, catheter 100 is shown passing through the inferior vena cava 14[[, the distal end 124]] and entering the right atrium 16.

AM
cont.
Catheter 100 comprises an elongated tubular body member 110 which leads to a distal portion 124, and finally a distal end 126. Distal portion 124 comprises an ablation device 130 (not shown) including one or more ablation elements 136 (not shown) adapted to emit ablative energy therefrom toward a target tissue site.

Please replace paragraph [0040] with the following amended paragraph:

AS
[0040] Catheter 100 further incorporates a steering system 102 having a distal attachment point A located proximal to distal portion 124 and a proximal attachment point at handle H as shown in Fig. 1C. As is discussed in greater detail below, once distal portion 124 is within the right atrium, tension is applied to a pull wire 104 which acts to deflect portion 124 substantially as shown. Therefore, as should be readily apparent from Fig. 1B, as the catheter 100 is deflected by steering system 102 from an initial position (shown in dashed line), with point A moving in a direction indicated by arrow D, the portion of catheter 100 distally located from point A is directed toward at least a portion of target tissue 10. Such a configuration enables the distal portion 124 of catheter 100 to be placed proximal to target tissue 10, allowing the emitted energy pattern E adjacent the point of contact to effectively impact upon target tissue 10, ensuring proper lesion formation at that location.

Please replace paragraph [0041] with the following amended paragraph:

Ab
[0041] As shown, when the distal portion 124 engages tissue 10, angle $[[\alpha_1]]$ α is defined by the longitudinal axis line $[[L_1]]$ L of catheter 100 which passes through attachment point A and tissue 10. The overall flexibility of distal portion 124 is sufficiently greater than tubular member 110, such that translation of pull wire 104 results in the deflection of portion 124 with respect to tubular member 110, which substantially retains its form.

Please replace paragraph [0043] with the following amended paragraph:

A7 [0043] As will be discussed in more detail below, steering system 102 may be incorporated into a separate guiding catheter (not shown), such that the ablation catheter, having an ablation device, can translate therein. It should also be noted that while the ablation device may be described as being deflected through operation of pull wire 104, this does not [[necessary]] necessarily mean the orientation of the ablation device is straight or linear. For example, the ablation device may be curved to address the natural curvature of an internal organ or to assist in its proper placement, the ablation device directed to the target tissue through the use of a guiding catheter configured to restrict the ablation device to an orientation similar to the guiding catheter until the ablation device emerges and assumes its predetermined form.

Please replace paragraph [0059] with the following amended paragraph:

A8 [0059] In the embodiment of Figs. 4A and 4B, ablation element 136 is a flexible antenna encased in an insulating material 134 adapted to emit electromagnetic energy radially about its structure over substantially its entire length, a portion of the radiated energy pattern generally depicted by arrows E. Insulating material 134 acts to hold ablation element [[132]] 136 a fixed distance from the target tissue, tissue 10 for example, when the distal portion 124 contacts the tissue as depicted in Figs. 2A and 2B. For the ablation device depicted, the insulator is a low-loss dielectric material able to transmit a substantial portion of ablative energy therethrough. Such materials may include, but are not limited to, TEFLON®, silicone, polyethylene, polyimide, or other materials having similar properties.

Please replace paragraph [0062] with the following amended paragraph:

A9 [0062] While ablation element 136 is depicted as a linear antenna structure, any suitable structure can be used including, but not limited to, a helical antenna, an isolated monopole antenna, a lossy transmission line, or an exposed monopole antenna. The ablation element 136 can be formed from any suitable material including, but not limited to, spring steel, beryllium copper, or silver-plated copper. The diameter of ablation element 136 may be from about 0.005 to about 0.030 inches, and more preferably from about 0.013 to about 0.020

19
64.
inches.

Please replace paragraph [0072] with the following amended paragraph:

110
[0073] Now turning to Fig. 6B, [[another]] catheter [[100]] 100C incorporating an alternative ablation device is shown. Catheter 100C has a distal portion 124 including an ablation device comprising at least one radio frequency (RF) electrode 136A-E operably controlled by the User through controlling means 140. The electrodes 136A-E of ablation device 130 define an energy pattern depicted by E, shown in dashed line. Controlling means 140 controls the application of energy to the electrodes 136A-E, either alone, as a group of one or more, or the entire group. For example, controlling means 140 of catheter 100C may comprise one or more electrically conductive wires operably connected to electrodes 136A-E and the handle portion (not shown). The User would apply ablative energy to target tissue through the direction of energy through one or more electrodes 136A-E via controlling means 140.
